

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

In the claims:

Claim 1 (Previously Presented): A pharmaceutical composition, comprising:
an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising: a polynucleotide comprising an immunostimulatory sequence (ISS) linked to the surface of a nonbiodegradable microcarrier (MC), wherein the ISS comprises the sequence 5'-C, G-3', with the proviso that if the MC is gold, latex or magnetic, the linkage is other than by biotin/avidin, and a pharmaceutically acceptable carrier.

Claim 2 (Previously Presented): The pharmaceutical composition of claim 1, wherein said polynucleotide is covalently linked to said microcarrier.

Claim 3 (Previously Presented): The pharmaceutical composition of claim 1, wherein said polynucleotide is non-covalently linked to said microcarrier.

Claim 4 (Previously Presented): The pharmaceutical composition of claim 1, wherein said microcarrier is a liquid phase microcarrier.

Claim 5 (Previously Presented): The pharmaceutical composition of claim 1, wherein said microcarrier is a solid phase microcarrier.

Claim 6 (Previously Presented): The pharmaceutical composition of claim 1, wherein said microcarrier is from 10 nm to 10 μ m in size.

Claim 7 (Previously Presented): The pharmaceutical composition of claim 6, wherein said microcarrier is from 25 nm to 5 μ m in size.

Claim 8 (Previously Presented): The pharmaceutical composition of claim 1, wherein said complex is antigen-free.

Claim 9 (Previously Presented): The pharmaceutical composition of claim 1, wherein the ISS comprises the sequence 5'-T, C, G-3'.

Claim 10 (Previously Presented): The pharmaceutical composition of claim 1, wherein the ISS comprises the sequence 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, G-3'.

Claim 11 (Previously Presented): The pharmaceutical composition of claim 1, wherein the ISS comprises the sequence SEQ ID NO:1.

Claim 12 (Withdrawn): A method of modulating an immune response in an individual comprising administering to an individual an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex in an amount sufficient to modulate an immune response in said individual, wherein said MC is a nonbiodegradable MC and wherein the ISS comprises the sequence 5'-C, G-3'.

Claim 13 (Withdrawn): The method of claim 12, wherein said microcarrier is a solid phase microcarrier.

Claim 14 (Withdrawn): The method of claim 12, wherein said microcarrier is a liquid phase microcarrier.

Claim 15 (Withdrawn): The method of claim 12, wherein the IMP/MC complex is covalently linked.

Claim 16 (Withdrawn): The method of claim 12, wherein the IMP/MC complex is non-covalently linked.

Claim 17 (Withdrawn): The method of claim 12, wherein said microcarrier is less than about 10 μm in size.

Claim 18 (Withdrawn): The method of claim 12, wherein said complex is antigen-free.

Claim 19 (Withdrawn): The method of claim 12, wherein a Th1-type immune response is stimulated.

Claim 20 (Withdrawn): The method of claim 12, wherein a Th2-type immune response is suppressed.

Claim 21 (Withdrawn): The method of claim 12, wherein the ISS comprises the sequence 5'-T, C, G-3'.

Claim 22 (Withdrawn): The method of claim 12, wherein the ISS comprises the sequence 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, G-3'.

Claim 23 (Withdrawn): The method of claim 12, wherein the ISS comprises the sequence SEQ ID NO:1.

Claim 24 (Withdrawn): A method of increasing interferon-gamma (IFN- γ) in an individual, comprising:

administering an effective amount of an immunomodulatory polynucleotide/ microcarrier (IMP/MC) complex to said individual, wherein said MC is a nonbiodegradable MC, wherein the ISS comprises the sequence 5'-C, G-3' and wherein an effective amount is an amount sufficient to increase IFN- γ in said individual.

Claim 25 (Withdrawn): The method of claim 24, wherein said individual has idiopathic pulmonary fibrosis.

Claim 26 (Withdrawn): The method of claim 24, wherein said microcarrier is a solid phase microcarrier.

Claim 27 (Withdrawn): The method of claim 24, wherein said microcarrier is a liquid phase microcarrier.

Claim 28 (Withdrawn): The method of claim 24, wherein the IMP/MC complex is covalently linked.

Claim 29 (Withdrawn): The method of claim 24, wherein the IMP/MC complex is non-covalently linked.

Claim 30 (Withdrawn): The method of claim 24, wherein said microcarrier is less than about 10 μm in size.

Claim 31 (Withdrawn): The method of claim 24, wherein said complex is antigen-free.

Claim 32 (Withdrawn): The method of claim 24, wherein the ISS comprises the sequence 5'-T, C, G-3'.

Claim 33 (Withdrawn): The method of claim 24, wherein the ISS comprises the sequence 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, G-3'.

Claim 34 (Withdrawn): The method of claim 24, wherein the ISS comprises the sequence SEQ ID NO:1.

Claim 35 (Withdrawn): A method of increasing interferon-alpha (IFN- α) in an individual, comprising:

administering an effective amount of an immunomodulatory polynucleotide/ microcarrier (IMP/MC) complex to said individual, wherein said MC is a nonbiodegradable MC, wherein the

ISS comprises the sequence 5'-C, G-3' and wherein an effective amount is an amount sufficient to increase IFN- α in said individual.

Claim 36 (Withdrawn): The method of claim 35, wherein said individual has a viral infection.

Claim 37 (Withdrawn): The method of claim 35, wherein said microcarrier is a solid phase microcarrier.

Claim 38 (Withdrawn): The method of claim 35, wherein said microcarrier is a liquid phase microcarrier.

Claim 39 (Withdrawn): The method of claim 35, wherein the IMP/MC complex is covalently linked.

Claim 40 (Withdrawn): The method of claim 35, wherein the IMP/MC complex is non-covalently linked.

Claim 41 (Withdrawn): The method of claim 35, wherein said microcarrier is less than about 10 μm in size.

Claim 42 (Withdrawn): The method of claim 35, wherein said complex is antigen-free.

Claim 43 (Withdrawn): The method of claim 35, wherein the ISS comprises the sequence 5'-T, C, G-3'.

Claim 44 (Withdrawn): The method of claim 35, wherein the ISS comprises the sequence 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, G-3'.

Claim 45 (Withdrawn): The method of claim 35, wherein the ISS comprises the sequence SEQ ID NO:1.

Claim 46 (Withdrawn): A method of reducing levels of IgE in an individual, comprising: administering an effective amount of an immunomodulatory polynucleotide/ microcarrier (IMP/MC) complex to an individual, wherein said MC is a nonbiodegradable MC, wherein the ISS comprises the sequence 5'-C, G-3' and wherein an effective amount is an amount sufficient to reduce levels of IgE in said individual.

Claim 47 (Withdrawn): The method of claim 46, wherein said microcarrier is a solid phase microcarrier.

Claim 48 (Withdrawn): The method of claim 46, wherein said microcarrier is a liquid phase microcarrier.

Claim 49 (Withdrawn): The method of claim 46, wherein the IMP/MC complex is covalently linked.

Claim 50 (Withdrawn): The method of claim 46, wherein the IMP/MC complex is non-covalently linked.

Claim 51 (Withdrawn): The method of claim 46, wherein said microcarrier is less than about 10 μm in size.

Claim 52 (Withdrawn): The method of claim 46, wherein said complex is antigen-free.

Claim 53 (Withdrawn): The method of claim 46, wherein the ISS comprises the sequence 5'-T, C, G-3'.

Claim 54 (Withdrawn): The method of claim 46, wherein the ISS comprises the sequence 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, G-3'.

Claim 55 (Withdrawn): The method of claim 46, wherein the ISS comprises the sequence SEQ ID NO:1.

Claim 56 (Previously Presented): A kit, comprising:
a container comprising an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, said complex comprising:
a polynucleotide comprising an immunostimulatory sequence (ISS) linked to the surface of a microcarrier (MC), wherein said MC is a nonbiodegradable MC and wherein the ISS comprises the sequence 5'-C, G-3'; a pharmaceutically acceptable carrier; and
instructions for use of IMP/MC complex in immunomodulation of an individual.

Claim 57 (Original): The kit of claim 56, wherein said polynucleotide is covalently linked to said microcarrier.

Claim 58 (Original): The kit of claim 56, wherein said polynucleotide is non-covalently linked to said microcarrier.

Claim 59 (Original): The kit of claim 56, wherein said microcarrier is a liquid phase microcarrier.

Claim 60 (Original): The kit of claim 56, wherein said microcarrier is a solid phase microcarrier.

Claim 61 (Original): The kit of claim 56, wherein said microcarrier is from 10 nm to 10 μm in size.

Claim 62 (Original): The kit of claim 61, wherein said microcarrier is from 25 nm to 5 μ m in size.

Claim 63 (Original): The kit of claim 56, wherein said complex is antigen-free.

Claim 64 (Original): The kit of claim 56, wherein the ISS comprises the sequence 5'-T, C, G-3'.

Claim 65 (Original): The kit of claim 56, wherein the ISS comprises the sequence 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, G-3'.

Claim 66 (Original): The kit of claim 56, wherein the ISS comprises the sequence SEQ ID NO:1.